Coaching in Early Education Classrooms Serving Children with Autism: A Pilot Study

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Abstract:

Coaching is gaining attention as a promising professional development approach in early education. However, in practice, many adult educators continue to rely on methods with inconsistent effectiveness, such as one-time trainings and workshops. In addition, there is limited evidence supporting the use of specific coaching models in early education. This article describes the development and pilot study of a coaching model developed to support early education teams in implementation of the supplemental intervention for preschoolers with autism, Advancing Social-communication and Play (ASAP). Two early education teams were assigned to each of the following groups: those who received ASAP training, those who received ASAP training and coaching, and a control group that received no support related to the intervention. Through descriptive analysis of qualitative and quantitative data, preliminary results of this pilot study suggest the coaching model impacted teams' collaborative practices and adherence to key elements of the intervention approach. Implications and practical applications are outlined for early education professionals and researchers who may implement coaching to support intervention efforts for students with autism.

Introduction

Adult education is a term that overarches a range of practices wherein adults engage other adults in activities aimed at learning or growth. These practices span a broad scope of professional development (i.e., pre-service and in-service) techniques that may include a principal supervising a newly-hired teacher or an early interventionist coaching a parent during home-based routines with their child. Most adult education approaches integrate Knowles' model of 'andragogy,' or adult education (in contrast to pedagogy, or child education), and its core principles of adult learning (Knowles, Holton, & Swanson, 2005). This set of principles emphasizes the importance of adults' readiness to learn, self-direction, internal motivation, and active participation through relevant, experience- and problem-centered learning (Knowles et al., 2005). Across diverse modes of adult education, these principles are incorporated to varying degrees, through different methods, and with disparate results.

The professional development approach that is emphasized in this article is coaching, specifically the development and trial of a coaching model for use with early educators serving students with autism spectrum disorders (ASD). Coaching is a method of adult education that is gaining attention as a promising tool for promoting meaningful learning and lasting change (Neuman & Cunningham, 2009). Coaching is included in discussions of many types of adult learning, spanning professional development (Gallacher, 1997) and parent education (Kaiser & Hancock, 2003), and is even cited as an aspect of other adult learning strategies (Trivette, Dunst, Hamby, & O'Herin, 2009). In the recent professional development literature, supervision, mentoring, and coaching have been discussed as promising alternatives to more traditional, yet questionably effective methods (e.g., one-time conferences and workshops; Cornett & Knight, 2008). These three professional development techniques share certain underlying features, but

are distinct in their goals, process, and level of individualization (Gallacher, 1997). Compared to supervision and mentoring, coaching is a more focused, individualized practice with the primary goals of supporting and encouraging adult learners, facilitating reflection, and refining specific skills through a systematic, but flexible, learner-driven process (Trivette et al., 2009).

Coaching in Early Education

There is a growing emphasis on the importance of high quality education providers and environments for the success of students. However, the majority of early educators reported that they felt underprepared to work with their diverse student populations (Winton, 2000), with only 60% of early childhood teacher preparation programs offering coursework related to working with children with disabilities (Chang, Early, & Winton, 2005). With the rapidly-increasing diversity (e.g., in terms of culture, language, socio-economic status, ability/disability) in classrooms, and the continued reliance on questionable professional education methods (Bruder, Mogro-Wilson, Stayton, & Dietrich, 2009), these statistics are even more alarming. Because teachers learn when they are intrinsically motivated to make changes and feel safe to experiment with new strategies (Zwart, Wubbels, Bergen, & Bolhuis, 2009), coaching provides an optimal framework for sharing the knowledge, skills, and beliefs necessary to maintain teacher quality and increase student achievement in our changing society.

Various models of coaching have been outlined over the years for use in the professional development of early educators and interventionists (Cornett & Knight, 2008; Gallacher, 1997). Despite slight variations in content and purpose, these models collectively embody a set of underlying principles that form the foundation of this unique approach to adult education. Throughout the early education and intervention literature, coaching is described as a voluntary process that is collaborative, is separate from evaluation or supervision, promotes self-

assessment and experimentation, and necessitates a trusting, respectful relationship between participating adults (Gallacher, 1997; Rush, Shelden, & Hanft, 2003). The long-term goal of coaching in early education is to help children participate and succeed in their everyday lives (Rush et al., 2003), and to improve the quality of life for care-giving adults (Ingersoll & Dvortcsak, 2006; Solomon, Ono, Timmer, & Goodlin-Jones, 2008).

Literacy coaching, technical coaching, instructional coaching, and peer coaching are just some of the many models discussed in the literature (Cornett & Knight, 2008; Gallacher, 1997). Some coaching models have specific goals, such as increasing students' literacy skills in literacy coaching (Neuman & Cunningham, 2009) and translating workshop content for classroom use in technical coaching (Gallacher, 1997). In contrast, other models have broader goals that are encompassed in a set of principles or outcomes. For example, instructional coaching was developed as a 'partnership approach' and emphasizes principles of equality, dialogue, choice, voice, reflection, reciprocity, and praxis (Cornett & Knight, 2008). Peer coaching is the model that has been most widely used in the field of early education. This model focuses on practitioners coaching one another in instructional techniques through either an expert-novice or reciprocal (i.e., alternating coach-learner) coaching relationship (Tschantz & Vail, 2000). This flexible model reflects most coaching models in its emphasis on individualized stages of description/instruction, modeling, practice, and reflection through feedback (Cornett & Knight, 2008). However, despite the prevalent use of these types of models, only a few coaching models have adequate evidence to support their use (Fox, Hemmeter, Snyder, Binder, & Clarke, 2011; Casey & McWilliam, 2011; Suhrheinrich, 2011).

Coaching can be described as a cyclical or stage-driven process (Zwart et al., 2009). The widely-used coaching process includes some or all of the following six stages, which can be

implemented in various sequences and individualized based on learners' skill, learning style, culture, and education (Kaiser & Hancock, 2003): (1) initiation of the coaching relationship wherein interest and rapport are established, logistics are discussed, and goals are collaboratively determined; (2) observation of learners in their natural environment during an agreed-upon time; (3) goal-related 'action,' which includes the learners practicing, experiencing, and thinking surrounding agreed-upon goals; (4) collaborative reflection, wherein observations are reviewed, positive and constructive feedback is offered, and learner reflection is facilitated; (5) evaluation of the coaching process, which involves coach self-evaluation, feedback from learners, and determination of need for continued coaching through review of progress toward goals; and (6) resolution, which occurs when outcomes are met and the learners make plans for continued growth and support following the conclusion of coaching (Gallacher, 1997; Hanft, Rush, & Shelden, 2004; Neuman & Cunningham, 2009; Rush et al., 2003). Together, these phases align with Knowles' adult learning principles in their focus on experiential learning and self-direction.

Need for Coaching in Autism Services

Early education and intervention for children with ASD is an area that calls for individual consideration due to its complexity, increasing prominence, rapidly growing literature on key deficit areas (e.g. social-communication, play), and continually evolving service delivery models (Odom, Collet-Klingenberg, Rogers, & Hatton, 2010). Children with ASD are served by a wide range of professionals, many of whom feel underprepared to work with this population (Schwartz & Drager, 2008). For example, in a survey of educational speech-language pathologists who had completed graduate-level clinical training, 25% felt incompetent in writing clinical goals for their students with ASD (Schwartz & Drager, 2008). Early educators are similarly underprepared to work effectively with their students with ASD (Scheuermann,

Webber, Boutot, & Goodwin, 2003). Professional development for early education professionals serving children with ASD requires sensitive and individualized training that is rarely built into professional development frameworks (or budgets). Some researchers have praised coaching's cost-effectiveness and ease of implementation (Hendrickson, Gardner, Kasier, & Riley, 1993), marking it as a promising supplement to the potentially outdated or incomplete pre-service preparation of professionals serving young children with ASD.

Need for ASAP Coaching Model

The Advancing Social-communication and Play (ASAP; Watson, Boyd, Baranek, & Crais, 2011) intervention program was developed to support public preschool education teams in promoting pivotal social-communication and play skills in preschoolers with ASD. The ASAP intervention is designed to address two content areas (i.e., social-communication and play) through clear hierarchies of goals in discrete categories of social-communication (i.e., social interaction, requesting, and joint attention) and play (i.e., exploratory, relational, functional, and symbolic play). ASAP is implemented in two contexts (i.e., one-to-one and group sessions; see Dykstra, Boyd, Watson, Crais, & Baranek, 2011 for additional description of the intervention). The development of the ASAP intervention presented a need for a unique coaching model that not only allowed for edification of early education teams in the deficit areas addressed by ASAP, but also fostered and supported collaborative efforts between educational team members (i.e., teachers, teaching assistants, and related service providers). In addition, as the ASAP coaches were research staff rather than school staff, they were presented with a set of circumstances (e.g., non-peer relationships, potential for distrust) not specifically addressed by many existing coaching models. Finally, the ASAP coaching process needed to allow for a finite endpoint, as opposed to the ongoing nature that many models utilize. Considering these factors,

the ASAP development team drew from existing models to develop a unique companion coaching model to support education teams implementing ASAP.

In presenting the ASAP coaching model, this article will: (1) describe the coaching model developed to suit the characteristics of the ASAP intervention and the needs of ASAP classroom implementation teams; and (2) report methods and data from a pilot study of the ASAP coaching model, performed to assess its feasibility, social validity, and impact on fidelity of ASAP implementation. In addition, implications and applications will be outlined for early education professionals, administrators, and researchers working in early education settings.

ASAP Coaching Model

The ASAP coaching model was developed through an iterative process informed by direct feedback from early education professionals who had implemented the intervention, as well as hands-on experience, review of relevant research, self-reflection, and consultation with experts in the field of coaching. This development process focused on delineating components of coaching (e.g., observation, team meetings), providing clear guidelines for dosage (i.e., frequency, duration), and establishing a procedural structure (e.g., forms, meeting structure). Specifically, the ASAP coaching model was developed during multiple phases of trial implementation of the ASAP intervention program in preschool classrooms (both inclusive and self-contained) educating children with ASD. Although coaching was not included in the original plans, the need for coaching was realized early in the project, with the need for a more refined model emerging over time due to the impact on teams' buy-in, confidence, and fidelity of implementation. The resulting coaching model is described below, along with methods and results of the ASAP coaching model trial.

Drawing from multiple coaching approaches (e.g., instructional coaching, cognitive coaching), the ASAP coaching model emphasizes mutual respect, collaboration, and professional empowerment (Cornett & Knight, 2008). Based on comprehensive reviews of the coaching literature (Rush et al., 2003; Gallacher, 1997), ASAP adopted three key principles to define its coaching model: (1) ASAP coaching is a collaborative and voluntary process, different from supervision or mentoring; (2) ASAP coaching uses mutual analysis of situations and results to create an environment that is conducive to self-discovery, problem solving, and collaboration in adult learners; and (3) ASAP coaching provides ongoing support, structure, and encouragement to adult learners as they move through the process of integrating this new intervention approach into their existing teaching strategies.

Similar to the coaching models described previously, the ASAP coaching model is comprised of six phases. The ASAP coaching model adapted an existing dynamic illustration of the coaching phases (Rush et al., 2003) to make evaluation of the coaching and learning process an ongoing practice, as opposed to an isolated phase at the end of the coaching process. See the ASAP coaching model illustrated in Figure 1. An additional feature that was developed to suit the unique needs of the ASAP coaching process is an emphasis on group collaboration through structured monthly team meetings (vs. one-on-one debriefing found in the more commonly-used peer coaching model) and corresponding creation of monthly team action plans (i.e., lists of goals to improve and support a team's ASAP implementation). Two classroom observations per month are built into the ASAP coaching model to inform the content of team meetings and allow research staff to become more familiar with the classroom, students, and team member styles. Finally, the ASAP coaching model addresses a gap in the coaching literature by including structured means of measuring the fidelity of coaching implementation.

Insert Figure 1 here

Pilot Study of ASAP Coaching Model

This article responds to the need for evidence-based coaching models by reporting methods and results of a pilot study of the ASAP model. This mixed methods design study captured quantitative and qualitative data to compare ASAP implementation and participant experiences across three groups of early education teams who received different levels of support over a 7-month period.

Participants & Settings

Six self-contained preschool classrooms serving children with developmental disabilities (all served at least one student with ASD) participated in the trial of the ASAP coaching model. The classrooms were drawn from a large, local public school district and were separated into three groups of two classrooms each, in order to assess the impact of the ASAP coaching model. One group (ASAP training group = AT) received the ASAP trainings and intervention manual. The second group (ASAP training + coaching group=ATC) received the ASAP trainings, intervention manual, and ongoing, structured support based on the ASAP coaching model. The final group (Control group=CO) did not receive any training, coaching or manual support from the ASAP team. See Table 1 for information about the participating teams and classrooms.

Insert Table 1 here

The ASAP coaches (first and second authors) were doctoral students and certified speech-language pathologists, each with at least five years' experience working with students with ASD in school-based and other interdisciplinary settings. The coaches had additional experience working on interdisciplinary collaborative teams in school settings. The coaches were familiar with the ASAP intervention and had provided support to education teams during

previous phases of the study, and co-developed the existing coaching model with the ASAP investigators. All coaching, training, and data collection activities took place in the public school settings during the school day or immediately following student dismissal. Participants were compensated for time spent in ASAP trainings outside of normal work hours.

ASAP Training & Manual

Teams in both the ATC and AT groups participated in an initial ASAP training and a booster training 1-2 months later. The initial training lasted approximately 3 hours and covered the following areas: definition of ASD; social-communication and play deficits commonly seen in children with ASD; social-communication and play development with corresponding ASAP goals; practice identifying behaviors related to goals; assessment procedures; general strategies; data collection; and manual use. The booster training lasted one hour and involved teams reviewing the ASAP goal hierarchies, discussing challenges and successful strategies, and brainstorming ideas for improved implementation, data collection, and/or team collaboration. All members of a team were present at each training.

In addition to receiving the ASAP training, the ATC and AT groups were also offered a copy of the ASAP intervention manual, which is a 400-page guide to the rationale, procedures, and goal hierarchies that constitute the ASAP intervention. The manual also provides activity ideas, data collection forms, parent information handouts, and clear photo depictions of each ASAP goal. Along with the manual, these teams received a 30x20 inch color wall chart with diagrams of the ASAP goal hierarchies and space to take notes and write students' initials as they progressed through the goals.

ASAP Coaching Procedures

Teams in the ATC group were also provided with structured support based on the ASAP

coaching model described above. The coaching support included two main elements: classroom observations and monthly team meetings. The classroom observations were completed twice per month and totaled to approximately 2-4 hours monthly. During this time, the coach observed ASAP implementation in the classroom, making sure to observe multiple team members as well as one-to-one and group-based implementation. During monthly team meetings, which lasted 40-60 minutes, the coach and members of the classroom education team met to discuss progress and brainstorm ideas. The coaches followed specific procedures for team meetings (see Table 2), including the important step of creating a team action plan at each meeting.

Insert Table 2 here

Dependent Variables

Data reflecting the fidelity of ASAP implementation were collected at two time points (i.e., baseline and follow-up) for each team, separated by an average of 7.5 weeks. These data were collected through facilitated teacher report using three separate measures of fidelity of implementation. One measured the dosage of intervention provided and the goals being addressed with a sample of students, while the remaining two measures recorded collaborative team planning and progress monitoring strategies. Fidelity interviews were conducted by other research staff (i.e., not the team's coach), with reliability of administration and response recording collected on 50% of interviews with 97% agreement. Two independent raters coded teacher-reported student goals for the extent to which they adhered to ASAP. Due to lower than desired inter-rater reliability (74% agreement), consensus procedures were used to code the interview notes related to these goals.

Additional, qualitative data were collected at the end of the study through one-on-one semi-structured interviews with fourteen out of seventeen education team members (three

members were not available). These interviews lasted between 15 and 45 minutes, and were aimed at determining the teams' understanding of the ASAP content areas (e.g., social-communication and play) prior to participation, the impact of the training and coaching on team members' practices (as appropriate), and the social validity of the coaching procedures in early education settings (as appropriate). Themes from these interviews were determined by two independent readers through an analytical approach examining field notes on informant responses to identify topic repetition (Ryan & Bernard, 2003).

Results

Data from the fidelity of implementation measures revealed interesting similarities and differences between groups. Due to the small number of participants in this pilot study, descriptive analyses of quantitative data were used to reveal patterns, in place of inferential statistics. Notable differences emerged in both the amount of reported team collaboration and the degree to which teachers reported addressing student goals that conformed to ASAP goals. Participating teachers were asked about their collaborative team planning and progress monitoring practices at two time points during the study (i.e., at the beginning and 6-8 weeks later). Changes in the number of collaborative practices reported at the first and second time points were compared across groups. Interestingly, although the ATC group had the smallest gap between data collection time points (i.e., 6.75 weeks vs. 8 weeks for AT and CO), they had the largest positive change (i.e., an increase of 5) in their use of collaborative team planning and progress monitoring practices. The AT group showed an average increase of 3.5, while the CO group actually showed a decrease of 4 in their reported use of such collaborative practices.

During the same two visits, the fidelity of implementation measure asked teachers to report student goals, each of which was coded in accordance with its level of adherence to the

ASAP intervention. Teacher-reported goals were scored on a scale of 0 to 2, with 0 indicating no adherence, 1 indicating partial adherence, and 2 indicating full adherence. The average goal score was then multiplied by the amount of time spent addressing those goals (i.e., dosage per goal), and results were compared across the three groups as indication of the teachers' knowledge and use of ASAP's central goal hierarchies. As expected, descriptive analyses showed the ATC group as having the highest average goals/dosage score at the second fidelity visit (331), followed by the AT group (119), and then the CO group (51). Furthermore, changes in these scores from the first to second time point show even greater group differences, as the ATC group increased their goal score by 246, while the AT and CO groups both showed decreases in their scores over time.

Qualitative themes from the post-intervention interviews with education team members were analyzed by group, with interesting results. The CO group expressed varied understanding of social-communication and play, sought a variety of outside resources (e.g., online resources, autism consultants, learning teams), and had a desire for more autism-specific training. The AT group reported that ASAP increased the priority they placed on play, gave them a more detailed understanding of the steps to achieving social-communication and play skills, and resulted in perceived child progress in broad areas of interaction with peers, language, and engagement. They also reported a desire for increased collaboration between educational team members, implying a deficit in this area. Finally, the ATC group's interview themes overlapped with those of the AT group (e.g., detailed understanding of steps, changes in students), but additional themes emerged, which included the following: a sense of support, focus, and accountability through ASAP coaching; an emphasis on the importance of collaborative brainstorming across team members; and an understanding of the important role of each team member (i.e., teachers,

teaching assistants, and related service professionals) in affecting students' skills through ASAP. Across all three groups, a lack of time for collaboration and planning was highlighted; however, only the ATC group emphasized the importance of working around this obstacle to achieve shared goals. See Table 3 for an exhaustive list of themes that emerged from the interviews.

Insert Table 3 here

Discussion

The development and pilot implementation of the ASAP coaching model provided the ASAP research team with the opportunity to examine the impact of the ASAP coaching model, compare its effects to those of the trainings alone, and gain valuable feedback from early childhood educators and interventionists who represent the end-users of this program. As such, this pilot study of the ASAP coaching model led to further revision and refinement of the coaching procedures and forms, in preparation for a larger-scale, multi-site study of the ASAP intervention and its accompanying support components (i.e., manual, training, and coaching).

When compared to CO team members' feedback, AT and ATC team members reported more progress in children's social-communication and play skills, and greater understanding of child development in those areas. Anecdotally, their classroom staff appeared to have a greater understanding of the ASAP goals and the developmental sequences provided through the intervention trainings. Thus, preliminary results suggest that the trainings were effective in changing the knowledge of educational practitioners. However, the ATC group showed greater increases in team collaboration and use of ASAP goals than the AT group, suggesting the importance of ongoing coaching support in changing the practices of educational practitioners. Although all groups recognized time as a major challenge to planning and/or collaboration, it seems that the collaboration embedded in the ASAP coaching process fostered a level of

acceptance that collaboration was valuable enough to supersede perceived barriers among those on the ATC teams. Overall, the ASAP coaching model was successful in supporting change in practices among professionals, with ATC teams sharing the sentiment that implementing ASAP would have been difficult without the support and accountability provided by the coaches.

There were certain limitations to the pilot study of the ASAP coaching model. Namely, the study included only six classrooms, and all were drawn from the same, large, high-performing school district. Results may not generalize to school districts that are smaller, have fewer resources, or are located in less urban/suburban settings. Additionally, the varied make-up of the classrooms (i.e., students with varying developmental disabilities versus autism only) may complicate group comparisons; however, in the local school system where the study was conducted, the classroom make-up did not necessarily correlate with the students' disability severity or the resources provided to the classroom. Finally, the different make-up of the teams favored the ATC group in terms of team size and representation, as it was difficult to recruit related service professionals to AT and CO group teams when fewer benefits (e.g., training, funds) were offered. Despite these limitations, however, this pilot study offers valuable evidence to inform current practices and guide future research in the area of coaching in early education.

Implications and Practical Applications

With this article, we hope to familiarize readers with the promising adult education practice of coaching, and illuminate the rationale for its increased use in early education. The ASAP coaching model provides a template for an approach that could be utilized by practitioners and researchers alike. As such, we will discuss some of the implications and practical applications of our findings as they pertain to practitioners, administrators, and researchers working in early education settings.

This pilot study of the ASAP coaching model demonstrates the benefits of coaching as a means of increasing professional accountability, emphasizing interdisciplinary collaboration, and gaining new skills for professionals working in early education. However, the ASAP research team also learned that professionals may need to advocate for time to engage in coaching and collaboration, and may wish to ask for outside resources and consultation (e.g., from the district's early childhood consultant) if a peer coaching method is not preferred. The current study did not solicit feedback from administrators; however, based on practitioners' comments, the ASAP research team feels that administrators may benefit from the implementation of classroom-based coaching models as well, both through practitioners' increased motivation and learning, and positive influence on child outcomes. Administrators may assist educators in coaching efforts by seeking funds, university partnerships, and other creative solutions to circumnavigate the constraints experienced across early education settings (e.g., limited time, staff, funding). For example, drawing student teachers from local universities can offer educators extra time and staffing to pursue professional development through coaching.

Finally, researchers examining the effects of complex or novel interventions for early education settings may wish to consider coaching as a means of supporting education teams learning and implementing the intervention(s). In the ASAP study, we realized the value of coaching midway through the intervention development process; however, we hope that future, similar studies will acknowledge the importance of coaching during initial planning of their program and support structure. The ASAP coaching model illustrates a promising template for use in situations where the coaches are research staff or in other ways 'outsiders'. The use of coaching in early education research is key to achieving high levels of educator buy-in and fidelity of implementation, as was realized in the latter stages of the ASAP project.

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Table 1. Educational team and classroom information

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Team	Team Members				Autism	Classroom	Class	Class	Half- vs. Full-	
	ıer		•		Experience	Experience	Type ^a	Size	Day Instruction	
	Teacher	TA	SLP	OT	(Avg. Yrs.)	(Avg. Yrs.)				
AT-1	X	X			10.5	11.5	DD	12	Full-day	
AT-2	X^{b}	X	X^b		1	5	DD	11(am)	Half-day	
								9 (pm)		
ATC-1	X	X^bX	X	X	7	6.25	DD	8	Full-day	
ATC-2	X	XX			4.3	4.3	DD	11	Hybrid	
CO-1	X	X			9.5	12.5	DD	12 (am)	Half-day	
								12 (pm)		
CO-2	X	X			7.5	3.5	AU	9	Full-day	

^a DD=serve children with various developmental disabilities; AU=self-contained autism classroom

^b Not available for post-intervention interview and not included in average experience calculations

Table 2. ASAP team meeting guidelines

Step	Purpose	Process
Opening	Initiate meeting; ensure regular data	Review previous action plan and
	collection	classroom data
Reflection	Guide team in self-assessment	Facilitate discussion of
		successes/challenges; review
		observations
Evaluation	Enhance team confidence; provide	Offer specific positive and
	guidance	constructive feedback
Action Plan	Develop feasible plan; wrap up	Brainstorm goals with team; facilitate
		new action plan; summarize meeting
Monitoring	Ensure fidelity to coaching procedures	Complete self-assessment form

Table 3. Themes from post-intervention interviews with school staff

	post-intervention interv		
Interview topics	CO group	AT group	ATC group
Views of social-communication and play	 Regular work on communication and play 	 Understanding of steps of skills Understanding importance of play	 Understanding of steps of skills Understanding of foundational nature of skills
Training and Resources	 Relied on a variety of resources Print resources: articles, online, books Other professionals: professional learning teams, autism coordinator 	 Importance of booster training Liked wall chart Limited use of manual 	 Importance of team training Liked wall chart and visuals Use of manual at beginning Feelings of support and accountability Coach provided unique perspective
Challenges	 Time for planning Limited training	• Team collaboration	Team collaborationTime and schedulingData collection
Changes from ASAP		 Child progress in peer interactions, engagement, and back and forth interactions Influence on IEP goals More emphasis on play 	 Child progress in peer interactions, initiations, and language Influence on IEP goals All staff aware of goals and skills Provided focus in the classroom Gave TAs a role More collaborative brainstorming

Figure 1. ASAP coaching model (adapted from Rush et al., 2003)

